

national accelerator laboratory

EXP-62A July 17, 1974

ACCELERATOR EXPERIMENT: Status of Main-Ring Correction

Magnet System

Date:

July 17, 1974

This is an amendment to EXP-62 (June 21, 1974). Since that time, many correction elements have been removed or rearranged and the change has been reported by Ben Prichard, Operations Bulletin #243, July 16, 1974. All correction elements are now arranged sixfold symmetric.

1.
$$2v_x = 39$$

iron-core quadrupoles at #36 and #42

2.
$$2v_y = 39$$

iron-core quadrupoles at #39 and #45

$$3. \quad v_{x} - v_{y} = 0$$

skew iron-core quadrupoles at #14, #27 and #43

4.
$$3v_x = 58$$

iron-core sextupoles at #28

5.
$$v_x + 2v_y = 58$$

air-core sextupoles at #27,
iron-core sextupoles at #35

6.
$$3v_y = 58$$

skew iron-core sextupoles at #14

7.
$$2v_x + v_y = 58$$

skew iron-core sextupoles at #17 and #22

8. Average octupole field

iron-core octupoles

QF stations #17, #22, #28, #36, #42

QD stations #21, #23, #25, #27, #33, #35, #37, #39

9. Average sextupole field for chromaticity

iron-core sextupoles

QF stations #13, #15, #17, #19, #22, #24, #26, #28 #32, #36, #38, #42, #44

QD stations #12, #14, #16, #21, #23, #25, #27, #29 #33, #35, #37, #39, #43, #45

Total number = $6 \times 27 = 162$.

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